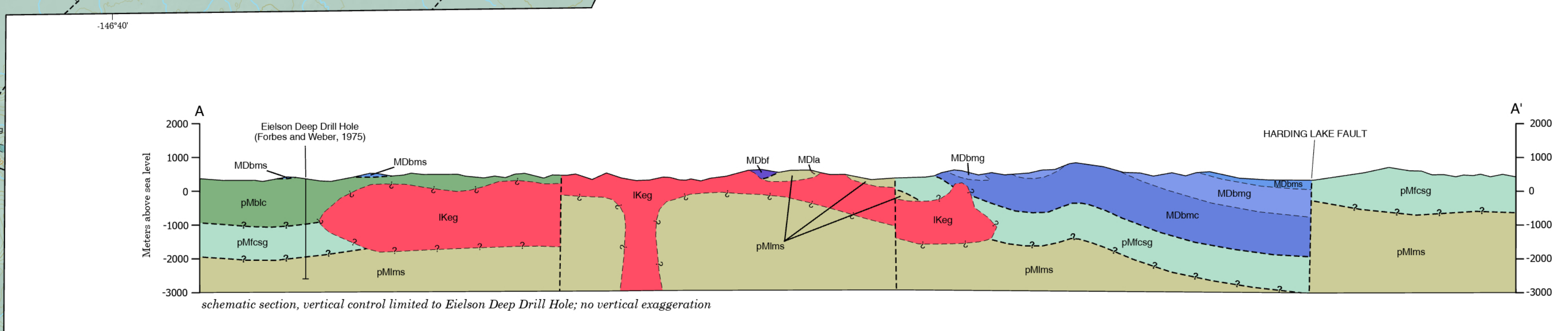


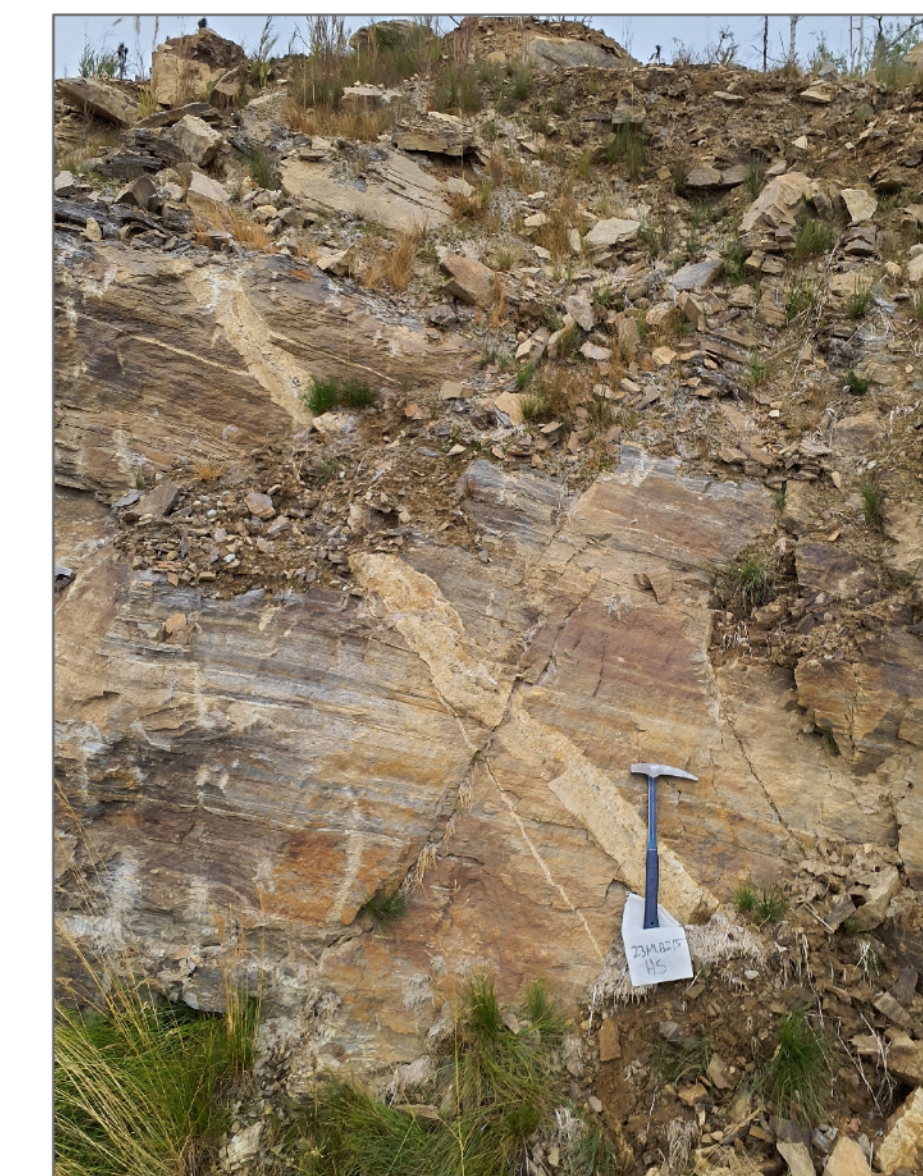
- EXPLANATION OF MAP SYMBOLS**
- Linework is solid where location is accurate, long-dashed where location is approximate, and short-dashed where location is inferred. Question marks indicate the existence or identity of the feature is questionable.
- CONTACTS AND FAULTS**
- CONTACT
 - FAULT — sense of movement indeterminate
 - LOW-ANGLE FAULT (UNKNOWN SENSE OF SLIP) — half-circles on hanging wall
 - NORMAL FAULT — ball and bar on hanging wall
 - STRIKE-SLIP FAULT, LEFT-LATERAL, OFFSET
 - FAULT APPROXIMATED BY AEROMAGNETIC SURVEY
- PLANAR FEATURES**
- SMALL MINOR INCLINED DIKE — showing strike and dip
 - SMALL MINOR INCLINED FAULT — showing strike and dip
 - SMALL MINOR INCLINED JOINT — showing strike and dip
 - SMALL MINOR VERTICAL JOINT — showing strike
 - INCLINED CLEAVAGE — showing strike and dip
 - INCLINED METAMORPHIC or TECTONIC FOLIATION — showing strike and dip
 - INCLINED BED-PARALLEL METAMORPHIC or TECTONIC FOLIATION — showing strike and dip
 - INCLINED GNEISSIC LAYERING — showing strike and dip
 - SMALL MINOR INCLINED VEIN — showing strike and dip
 - SMALL MINOR ANTIFORM — showing trend of hinge line
 - SMALL MINOR OVERTURNED ANTIFORM — showing trend of hinge line
 - SMALL MINOR OVERTURNED SYNFORM — showing trend of hinge line
- LINEAR FEATURES**
- MINOR INCLINED ANTIFORM HINGE — showing trend and plunge
 - MINOR INCLINED ASSYMMETRIC FOLD HINGE — showing trend and plunge
 - INCLINED, SMALL MINOR FOLD HINGE — showing trend and plunge
- MISCELLANEOUS MAP SYMBOLS**
- CROSS SECTION LINE
 - SYNFORM — showing approximate hinge trace
 - ANTIFORM — showing approximate hinge trace
 - Eielson Deep Test Hole located from fieldwork, airphotos
 - P-T estimates (Lessard, 2006) consistent with Lake George assemblage
 - P-T estimates (Lessard, 2006) consistent with Fairbanks-Chena assemblage
 - Lake George amphibolite confirmed by microprobe
 - Fairbanks-Chena amphibolite confirmed by microprobe
 - GEOCHRONOLOGY SAMPLE LOCALITY (Buchanan, Barrera and others, 2025 and Buchanan, Gavel and others, 2025)
 - MAP UNIT POINT - Dikes or other localized map unit with observations too small to draw at map scale; colored and labeled the same as map units above.



GEOLOGIC MAP UNITS

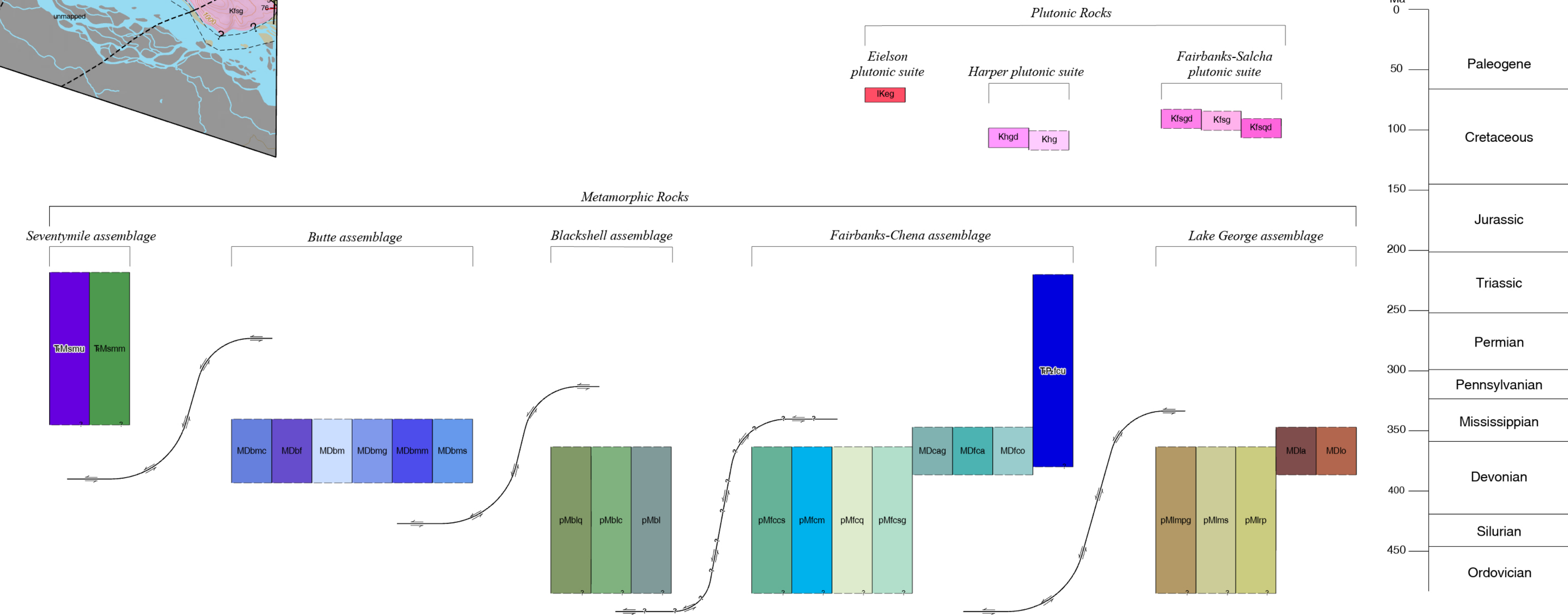
Please see accompanying report for descriptions of the map units.

- PLUTONIC ROCKS**
- EIELSON PLUTONIC SUITE**
- Kkg GRANITE (Latest Cretaceous)
- FAIRBANKS-SALCHA PLUTONIC SUITE**
- Khg GRANITE (Early Late Cretaceous)
 - Khng GRANODIORITE (Early Late Cretaceous)
 - Khdg QUARTZ DIORITE (Early Late Cretaceous)
- HARPER PLUTONIC SUITE**
- Khp GRANITE (Late Early Cretaceous)
 - Khpg GRANODIORITE (Late Early Cretaceous)
- METAMORPHIC ROCKS**
- SEVENTYMILE TERRANE**
- MChn METAMAFIC ROCKS (Triassic to Mississippian)
 - MChng META-ULTRAMAFIC ROCKS (Triassic to Mississippian)
- BUTTE ASSEMBLAGE**
- MChng MARBLE DOLOSTONE and CALC-SCHIST (Mississippian to Devonian)
 - MChn METAFELSIC ROCKS (Mississippian to Devonian)
 - MChng METAMAFIC ROCKS (Mississippian to Devonian)
 - MChng METACONGLOMERATE (Mississippian to Devonian)
 - MChng METAGRIT (Mississippian to Devonian)
 - MChn METASEDIMENTARY ROCKS (Mississippian to Devonian)
- BLACKSHELL ASSEMBLAGE**
- MChn CARBONACEOUS ROCKS (Pre-Mississippian)
 - MChn CALC-PHYLLITE and MARBLE (Pre-Mississippian)
 - MChn QUARTZITE and QUARTZ PHYLLITE (Pre-Mississippian)
- FAIRBANKS-CHENA ASSEMBLAGE**
- MChn META-ULTRAMAFIC ROCKS (Triassic to Paleozoic)
 - MChn CENTRAL CREEK AUGEN ORTHOGNEISS (Early Mississippian to Late Devonian)
 - MChn AMPHIBOLITE (Mississippian to Devonian)
 - MChn ORTHOGNEISS (Mississippian to Devonian)
 - MChn CALC-SILICATE GNEISS (Pre-Mississippian)
 - MChn MARBLE (Pre-Mississippian)
 - MChn QUARTZITE (Pre-Mississippian)
 - MChn SCHIST and GNEISS (Pre-Mississippian)
- LAKE GEORGE ASSEMBLAGE**
- MChn AMPHIBOLITE (Early Mississippian to Late Devonian)
 - MChn ORTHOGNEISS (Early Mississippian to Late Devonian)
 - MChn METASEDIMENTARY ROCKS (Pre-Mississippian)
 - MChn RECRYSTALLIZED PARAGNEISS (Pre-Mississippian)
 - MChn MISMATTITE and PARAGNEISS (Pre-Mississippian)

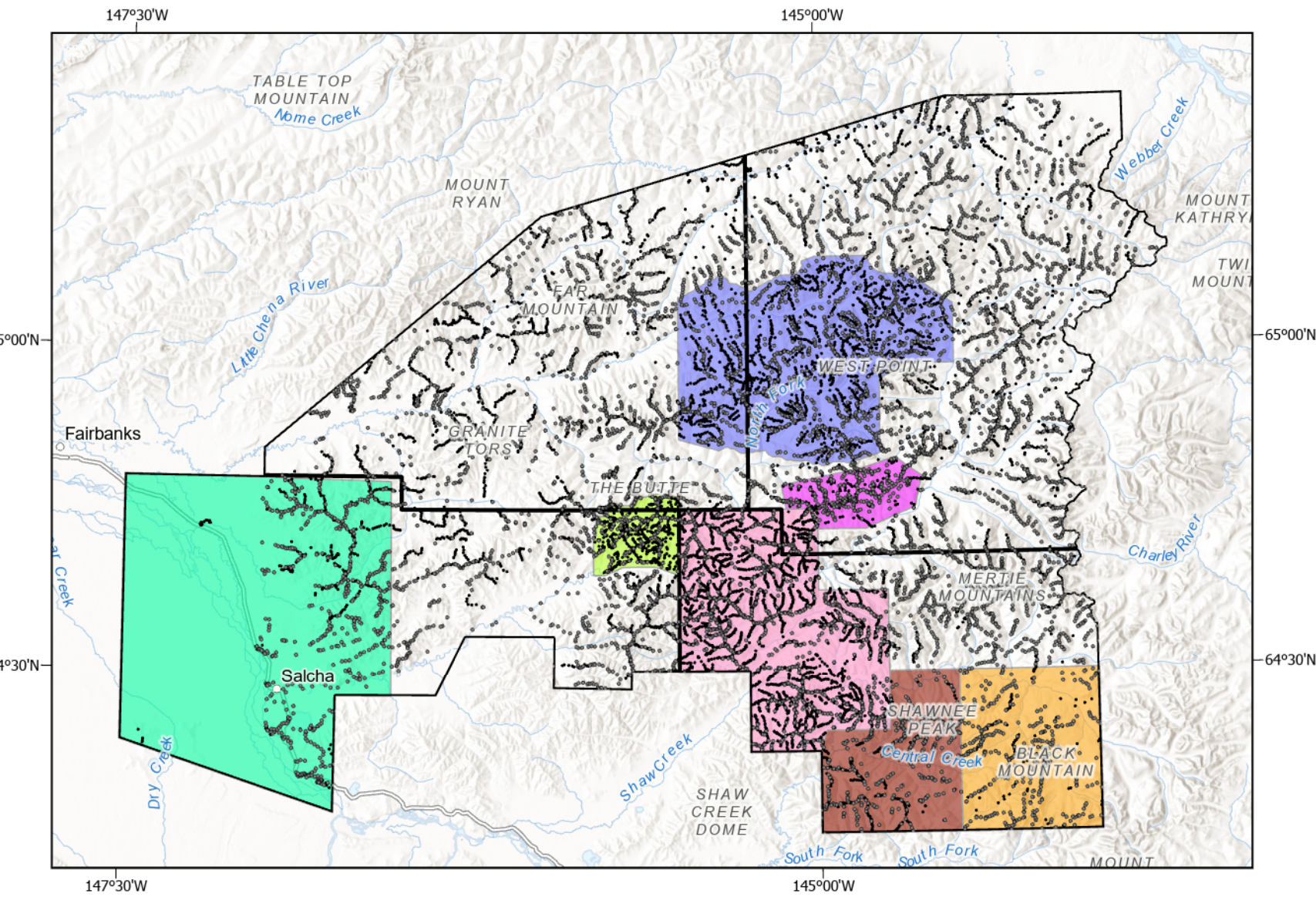


Pyroclastic dike of the Eielson Intrusion (Kkg) cutting Lake George Metasedimentary rocks (pMts) immediately north of the contact exposed by the rerouting of Salcha Road in the Yukon Training Area (photograph taken 08/18/2023 by M.L. Barrera).

CORRELATION OF MAP UNITS



FIELD STATIONS AND SUPPLEMENTARY DATA SOURCE MAPS COMPILED



- FIELD STATION LOCALITY**
- DGS FIELD STATION LOCALITY (Weber and Foster, 1964–2000; Day and others, 2008)
 - Sims and others (2026)
 - Day and others (2007)
 - Day and others (2003)
 - Werdon and others (2004)
 - Lessard and others (2022)
 - Smith and others (1994)
 - Ward and others (2004)
 - Southworth (1985)

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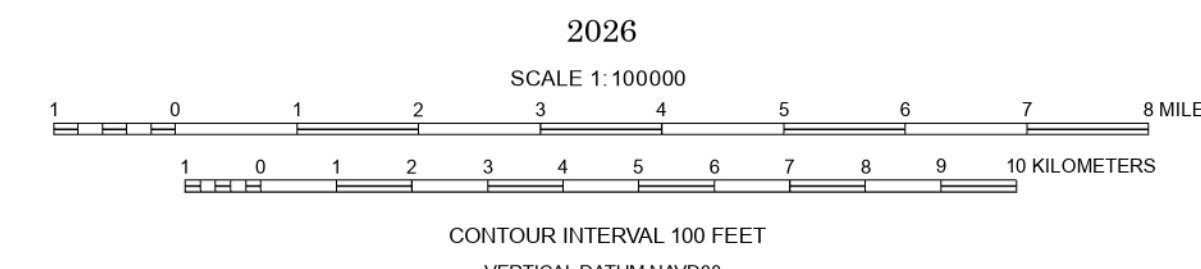
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Bedrock Geologic Map of the Yukon Training Area and Lower Salcha River, Big Delta and Fairbanks Quadrangles, Alaska

by

M.L. Barrera¹, R.J. Newberry¹, Evan Twelker¹, J.W. Buchanan¹, and T.J. Naibert¹



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Topographic base map from:
Shaded-relief base map and topographic lines created from:
U.S. Geological Survey FFSAR Digital Terrain Model (2010)
Hydrology from:
U.S. Geological Survey National Hydrologic Dataset (2017)

Projection:
Universal Transverse Mercator Zone 6N

Datum:
North American Datum of 1983

Geologic field investigations by:
M.L. Barrera, J.N. Biegel, J.W. Buchanan, M.M. Gavel, D.A. Harvey, T.J. Naibert, R.J. Newberry, Evan Twelker, Aleja Wypych, D.J. Stumigala, I. F. Muller (2023)
M.L. Barrera, J.W. Buchanan, L.P. Norwood, T.J. Naibert, R.J. Newberry, C.M. Truskowski, Evan Twelker, D.J. Stumigala (2024)
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